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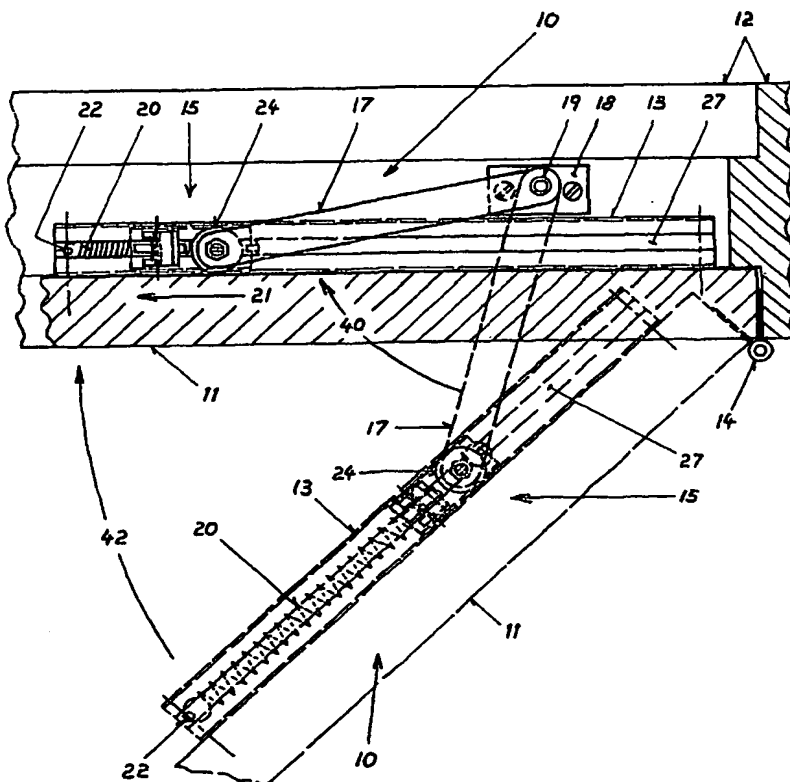
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(54) Title: MECHANICAL DOOR CLOSER



(57) Abstract: A mechanical door closer (10) that includes a spring (20) mounted in a track (13) to urge the door (11) to a closed position. A brake assembly (24) controls that rate at which the door (11) closes. The brake assembly (24) includes a brake hub (25) that has ramp slots (32) that receive balls (33) that engage a braking shell (34) to cause the braking assembly (24) to frictionally engage the track (13) to thereby control movement of the door (11).



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INTERNATIONAL SEARCH REPORT

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Int. Cl. ⁷ : E05F 3/16		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI: E05F 3/00, 3/16, 3/22 and BRAKE, FRICTION, SPRING , BIAS		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 790 381 A (E C O SCHULTE GMBH & CO. KG) 20 August 1997 Whole document	
A	EP 635 613 B (RYOBI LTD) 21 January 1998 Whole document	
A	EP 740 040 A (MARKUS HERMETISCHE DEUREN B.V.) Whole document	
<input type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU02/01639

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
EP	790381	DE	19548202
EP	635613	JP	7082942
EP	740040	NONE	
END OF ANNEX			